



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

FRATERNAL LIFE INSURANCE

BY MILES M. DAWSON, F. I. A.

In discussing assessment life insurance, it was shown that assessmentism is a pathological phase of life insurance, by which is meant that it was a mistaken system of life insurance, the course of which was predetermined by the character of the system itself. That course means dissolution, the only escape being a reform of method before the necessary result of the system has become realized. It will be recalled that all of these companies operating on what was known as the business assessment basis, with a few conspicuous exceptions, have either failed or been reorganized upon the level premium plan into old-line companies. The methods of these reorganizations would be interesting, and might properly form the subject of another lecture, but there is no occasion to discuss them to-day. It will be recalled that the few assessment societies which have so far continued without reorganization are either in a moribund condition, or the effects of error in plan have been temporarily offset by great economy of management, great care in the selection of risks and the accumulation of reserves, albeit insufficient reserves.

We have a much more cheerful task before us to-day, for we shall be considering the course of the same pathological phase of life insurance, assessmentism, in a class of institutions which have on the whole been exemplary in the matter of economy of management, and also in the selection of risks, and which in addition have very great vitality on account of the strong fraternal sentiment that binds their members together and causes them to cling to the institution in solving its difficulties, instead of deserting it as soon as the danger signal appears. I refer to the fraternal life insurance societies of the country.

Their vitality and innate strength, and their ability to cope with and overcome errors of plan, which would destroy companies of another character, are illustrated by the fact that the Ancient Order of United Workmen, the oldest fraternal society, and the institution

which first introduced assessmentism into the United States, is still flourishing with a membership of more than 400,000, and more than \$700,000,000 of insurance in force upon their lives. This society has undergone two reorganizations and has survived the shocks of these readjustments, and bids fair to outlive permanently the effects of the fundamental error in plan which attended its original organization. On the other hand, that large brood of assessment societies, managed on a business basis, which sprang up as a result of the early successes of this Order, and which at one time had a very large proportion of the total insurance of the country upon their books, has diminished in numbers, by failure and reorganization, to a mere handful and no longer cuts any figure in life insurance returns.

This fact alone would illustrate sufficiently the difference between the two plans of organization, but there may be added to it the following: The last ten years, and especially the last five years, have been years of readjustment of rates in the fraternal societies of the country, many of the most important of them having changed from incorrect and unsafe plans to more scientific methods. Had there not been anything to offset the natural effects of the incorrect plans, and had those societies possessed no greater vitality than the assessment companies, the result would have been the passing out of existence of many of the fraternities. On the contrary, there have been but two or three important fraternities to decay and go out of existence, and in each case it was due to failure to act promptly rather than to the deficiencies of plan, which might easily have been remedied. Moreover, while ten years ago, these societies had in round numbers one-half of the total insurance in force, they have through the period of readjustment more than held their own absolutely, showing a good increase in membership each year, and the only effect of the readjustment has been that they have lost in relative position, having fallen perhaps from half the total to about one-third the total. Their popularity still remains undiminished and, the readjustment period passed, there appears to be no reason why they should not regain their relative position also.

Let us consider somewhat closely the nature of the fundamental error in the assessment plans. The first of these plans to be considered is that of equal rates without regard to age, which we may call the flat assessment plan. Under this, members admitted at the age of twenty, thirty, forty, fifty or sixty were all assessed the same

amount toward the payment of death losses, although, according to one of the standard tables, at the age of twenty, the risk of death calls for a payment of \$7.80 per \$1,000 or about sixty-five cents per month; at age thirty, for \$8.43 or about seventy cents per month; at age forty, for \$9.79 or for about eighty-two cents per month; at age fifty for \$13.78 or \$1.15 per month, and at age sixty, for \$26.69 or \$2.22 per month. It will be observed, therefore, that the older members would be assessed much less than their insurance actually cost and the younger members much more. That such a plan could have started at all was due, therefore, to two circumstances outside of the historical conditions to which I adverted in the article on assessment insurance, viz.: That there was extreme economy of management which more than offset any additional cost to the younger members for the time and, second, that the fresh medical selection kept the total cost far below that indicated by the tables for several years, and as the societies grew very rapidly, in some cases for many years.

Evidently, however, the plan has within it the seeds of dissolution, for the members admitted grew older constantly, and this threw more and more burden upon two classes of members, viz.: Those who are still at the younger ages, and more especially those who are newly admitted at the younger ages. After a time, it could not but result in the refusal of young persons to come in, and also the withdrawal of many of the younger members. Where there was great economy of management, however, so that the excess charged for mortality upon the younger members did not equal the difference between the expenses in the society and the high expenses in other companies, and where also, the mortality was kept at a low point by a large growth and fresh medical selection, the development of this difficulty was delayed for a long time, and many were deceived thereby.

Notwithstanding this, after a time the idea became prevalent among the patrons of fraternal societies, as well as elsewhere, that there ought to be graded rates for the various ages. There was great distrust, at the time, of actuaries by the members of fraternal societies, and there was also great distrust of fraternal societies on the part of actuaries. The members believed actuaries to be false scientists, employed to bolster up the hated old-line business, and actuaries, knowing that the assessment plan was fallacious and in the

end ruinous, were wholly out of sympathy with the fraternal societies which employed such plans. Consequently, when the idea first became clear in the minds of the patrons of the societies, that there ought to be graded rates, they naturally turned to the mortality tables to help themselves, and they found there rates of mortality according to age. They believed a reserve to be an unnecessary thing and a "fifth wheel for a wagon," as they called it, and this view was somewhat confirmed by a book published by the late Mervin Taber, in which he divided a premium into what he called its "elements," viz.: Mortality, reserve and expenses. This division was meretricious and misleading in fact, being good for one year only, the division of the level premium into such elements changing with each year and after some years the mortality charge actually exceeding the whole net premium and encroached upon the accumulations of a reserve. But this was not made clear in the book.

Therefore, the next plan was what has been known as "graded assessment," that is assessments graded according to ages at entry. Precisely as under the other plan, only enough was intended to be called to pay current losses, but now the assessments were made, for instance, sixty-five cents at age twenty; seventy cents at age thirty; eighty-two cents at age forty; \$1.12 at age fifty; \$2.22 at age sixty, or other varying rates, supposed to represent the mortality at the various ages. Once fixed, these rates were not intended to be changed; that is to say, a member who entered at twenty would pay at the same rate until he was forty, fifty, sixty, seventy, eighty, ninety or whatever age you please.

Supposing now that this rate was properly determined at the age of entry, it must be manifest that when a man was twenty years older, he will be subject to an average mortality rate at an age twenty years higher, and not to the rate at his original age. Let us assume, therefore, members admitted at twenty, thirty, forty, fifty and sixty, for instance. The member at thirty pays but a small advance, about 5 per cent., on the member at twenty; the member at forty shows an advance of about 25 per cent. on the member at twenty; the member at fifty shows an advance of over 70 per cent. on the member at twenty; the member at sixty an advance of over 200 per cent. on the member at twenty. Now let us look at these same members twenty years later, and for the moment assume, that no new members are admitted, so that it is a mere question of dis-

tribution of cost between these members. The member admitted at twenty is now forty. In order to pay for his insurance at twelve assessments per year, the mortality being as per this table, he should be paying eighty-two cents instead of sixty-five cents, or more than 25 per cent. additional. The member admitted at age thirty is now fifty and should be paying \$1.12 or 60 per cent. more than before. The member admitted at forty should now be paying \$2.22, or 170 per cent. more than before. The member admitted at age fifty, now seventy, should be paying \$5.17 or 360 per cent. more than before, while the member at age sixty, now eighty, should be paying \$12.04, or 442 per cent. more than before.

It, however, is not of absolutely the first importance, that each of these should receive his insurance for twelve assessments of the same size as before. The important question to determine is whether the ratios of the payments which they are making at the outset to one another is a correct ratio now twenty years later, so that each of them is paying his fair proportion of the total cost. Twenty years before the member admitted at twenty and the member at forty were paying in the proportion of sixty-five and eighty-two and that still remains their rate. In other words, the man at forty was paying about 20 per cent. more than the man aged twenty; each of them is now twenty years older and the cost to the member admitted at age twenty who is now forty, is eighty-two cents per month or 25 per cent. more; for the member admitted at age forty who is now sixty, \$2.22 per month, which is not 25 per cent. more, but is 170 per cent. more in round numbers. It, therefore, follows that this plan becomes correspondingly advantageous to the members as they become older and necessarily disadvantageous to the younger of them. Thus, for instance, the member admitted at age sixty is paying \$2.22 instead of \$12.04, or about five and one-half times as much. That is, he is getting five and one-half times the benefit, while the member at age forty, who is admitted at age twenty is only getting 25 per cent. additional benefit.

This would be bad enough for a society which admitted no new members and would be extremely unfair to the younger members. It would, however, soon work its own cure, either by the disease running its course and destroying the institution, or by a reformation of plan. The admission of new members, especially in large numbers, tends to divide the extra cost of the old members' insur-

ance over their own payments among a larger number, but it is yet more unfair, because in effect it taxes not merely upon the member at forty who was admitted at twenty an unfair share of the mortality, out of all proportion to the cost of his own protection, but it taxes also the newly admitted members at age twenty, the same proportion which the other member pays at forty. After some years this must necessarily be discontinued. The length of time that it can continue depends upon the growth of membership, economy of management, excellence of fresh medical selection and other things, but in the end it must always spell ruin, unless relinquished.

The fact that members who are admitted at twenty, for instance, do not continue to experience the death-rate proper to the age of twenty forever, has not failed to be noticed by the patrons of fraternities, and in consequence, some years ago, a fraternal society was organized which offered protection, the rate increasing as the member grows older, but it was realized that this sort of insurance would not be attractive if the plan were carried to its conclusion and, therefore, it was provided that there should be no increase after the member attained the age of sixty. The society created no reserve to take care of the excess cost of protection to members beyond sixty over their payments and, therefore, this plan when carried on long enough to get a considerable membership beyond the age of sixty, also threw upon the younger members and upon the new entrants, a large part of the burden of the cost of the protection furnished to the older members. This plan in its original form attracted a good many of the more discerning and questioning patrons of fraternal insurance, and it has been adopted by a few societies other than the societies which originally introduced it, but it has not become widely popular.

When the time finally came for reorganization, some of the societies which by reason of comparative poor medical selection, slow growth or lack of economy, became victims of the defects of the system earliest, passed out of existence. Their fate served as a warning to others, and there began to be an active movement for adequate rates and sound plans. This movement has gone forward, until at the present time several of the most important fraternities have made changes in their plans looking toward financial strength and permanence. These changes for the most part consist in the adoption either of level rates correctly computed on a scientific basis,

or of level term or increasing term rates during the working period of life, merged into level rates beginning at old age. The societies have employed, in connection with devising these plans, various actuaries, and have shown a commendable disposition to study their conditions thoroughly, and to adopt new rates which will, when the shock to the organization has passed, put it upon a permanent and solid basis. They have approached the problem with courage and intelligence, and the work which they have accomplished within a few years has received the approval of all who are thoroughly acquainted with the nature of the problems before them, and has enlisted sympathy and co-operation on all sides. Moreover, they have, notwithstanding the somewhat radical changes which have sometimes been necessary, held a large proportion of their old membership and in every case, as soon as the shock of the readjustment had been recovered from, they have again begun to increase their membership.

This favorable result is due to several things, among which may be mentioned the following: The vast amount of education of members which has gone forward in recent years; the loyalty and fidelity of both the officers and the members, and their willingness to make sacrifices for what they believe to be a great and worthy cause; the fact that these changes are brought about by the action of representative bodies, a large majority of the members of which must perforce be convinced, before anything is done; the fact that the members of these representative bodies, having served the societies in various capacities for many years, have a thorough practical knowledge of the conditions and consequently have been able in most cases to suggest variations from the proposed program, which while not impairing the sound basis of the new rates, make them more acceptable to the membership; and, lastly, the fact that economy of management goes a long way toward offsetting the strain upon the membership due both to the check in the new growth which occurs for a time and the consequent loss of the large advantage of fresh medical selection, and also to the introduction of reserve charges which are found necessary under practically all the plans proposed.

It would be beside the purpose to give instruction here in what may be called physiological life insurance, or the normal phase of it; and I shall not undertake to do it. But I must lay down a few elementary principles in order that the nature of the changes which these societies have been compelled to make in their readjustments

may be understood. The methods of computing premiums, after one is furnished a mortality table fairly expressing the mortality to be expected, and also has determined upon a rate of interest at which funds not immediately required will accumulate, are fully presented in numerous insurance works and require no discussion for the present. Suffice it to say at this point, that one only need to know how an actuary knows that a rate is correctly computed. This I will undertake to explain in as few words as possible.

Assume 100,000 members admitted at the age of twenty and that they die precisely as per a certain mortality table. Let the rates be paid level for life or increasing for life, or increasing for a time and then level, theoretically it matters not which. In any event, if the rates have been correctly computed and the company has precisely the mortality called for by the table, and earns precisely the assumed rate of interest upon any funds that are not immediately required, the following will be the case, viz:

Starting the first year with the premiums for that year, improving them at the assumed rate of interest to the end of the year, paying out of this fund the losses according to the table for the year; adding the premiums for the new year by survivors, improving at the same rate of interest up to the end of that year; paying the losses for that year; and repeating this process until the highest age in the table has been attained and passed; there should then remain precisely sufficient money to pay the claims of the last members to survive, and nothing left. This is the test of just and adequate rates, no matter whether the company be a fraternal society or an old-line company.

A variation has been offered from this of the following nature, viz: That the discontinuances of members be taken into account, and no part of the reserves contributed by them be returned upon surrender. If this is admitted, it must necessarily be with great caution, because these discontinuances vary, it has been found, with ages, with years of insurance or membership and with calendar year, that is, according to whether you take the experience of one calendar year or another. Moreover, it is not believed that any society can permanently collect large reserve funds from its members, without accounting to them if misfortune overtakes them, by some sort of surrender value.

Two remarkable statements as to the part which an actuary

should play in these readjustments have recently been made—one by a distinguished college professor and one by a man prominent in fraternal circles. The former ridicules the idea that the subject can safely be dealt with by a representative body of laymen, and practically affirms that the actuary's word should be accepted without question, and that the formulation of sound plans should be left completely to him. The other has stated, that, on the other hand, the actuary should play the part of an attorney only, and should not make his own personal views felt at all in the matter, except in the form of special confidential advice to the leading officers as I understand his statements. From personal experience, I am able to say that both views seem to me to be wrong. The greatest possible advantages accrue to the society from a free interchange of views between the actuary, serving as a consultant of the society, and the members of the representative body; such modifications being made as seem to the latter to be desirable, taking into account the peculiar conditions, subject always of course to explanations by the actuary as to the normal and necessary results of the modifications. Even in the most technical matters, it is found that the representatives, when once interested, easily get a firm grasp of the principles; their suggestions are frequently of the highest value, and no actuary working alone in the seclusion of his office can possibly meet all the practical objections to a plan which he formulates, that will be raised in a representative body of this character. The best results, therefore, are likely to be obtained by the co-operation of the scientists and the members' own representatives, and it is my firm conviction also that the highest form of government is by an instructed common people.

I cannot close without paying my tribute of earnest admiration to the leaders of the fraternal societies and particularly to the members of these societies. They have everywhere risen nobly to the duties before them and even when they have declined, in any considerable body to acquiesce in the proposed changes it will be found upon examination that there are peculiar circumstances which excuse them and explain their action. The willingness to have sound plans introduced has been remarkable; objections have most frequently been to special features which bore more heavily upon members in one section than on members in another.